

*CLAIM AMENDMENTS*

1 and 2 (Cancelled)

3. (Currently Amended) A method of manufacturing a semiconductor device comprising ~~the steps of:~~:

using a lead frame ~~composed of~~ including a plate-like body having ~~an uneven a non-planar~~ upper surface and a plain planar under surface, ~~said plate like body comprising~~ a first thin portion for mounting a semiconductor chip ~~provided with~~ and having a plurality of pad electrodes, a plurality of first thick portions ~~provided around radially arranged~~ in said first thin portion for forming lead electrodes respectively ~~arranged~~ corresponding to the pad electrodes of ~~said the~~ semiconductor chip, a second thin portion ~~provided located~~ between pairs of said plurality of first thick portions, a third thin portion ~~provided for peripherally~~ surrounding said plurality of first thick portions, and a second thick portion ~~provided around~~ surrounding said third thin portion;

sealing integrally ~~said the~~ semiconductor chip, ~~and~~ said lead electrodes ~~and connecting means~~ up to the same surface as ~~that of all of said first, second, and third thin portions with a seal resin layer~~, after making a connection between said plurality of pad electrodes of ~~said the~~ semiconductor chip mounted on said first thin portion and said plurality of lead electrodes ~~by said with~~ connecting means; and

removing said first, second, and third thin portions by etching so that each of said plurality of lead electrodes includes a thin internal lead portion having a connection part ~~to said connecting means on the an~~ upper surface side and a thick external electrode portion protruding toward ~~the an~~ under surface and forming a connection part ~~to outside~~, wherein ~~said seal resin layer is formed so that the has an underside thereof forms substantially the same surface co-planar with~~ as the under surface of the internal lead portion of said lead electrodes, and so that said external electrode portion protrudes downward outward from the underside of ~~said seal resin layer~~.

4. (Currently Amended) The method of manufacturing a semiconductor device according to claim 3, wherein the first, second, and third thin portions have substantially the same thickness.

5. (Currently Amended) A method of manufacturing a semiconductor device comprising ~~the steps of:~~:

using a lead frame composed of including a plate-like body having an uneven a non-planar upper surface and a plain planar under surface, said plate-like body comprising a first thin portion for mounting a semiconductor chip provided with and having a plurality of pad electrodes, a plurality of first thick portions provided around radially arranged in said first thin portion for forming lead electrodes respectively arranged corresponding to the pad electrodes of said the semiconductor chip, a second thin portion provided located between pairs of said plurality of first thick portions, a third thin portion provided for peripherally surrounding said plurality of first thick portions, and a second thick portion provided around surrounding said third thin portion to form an auxiliary electrode, a fourth thin portion provided around surrounding said second thick portion, and a third thick portion provided around surrounding said fourth thin portion;

sealing integrally said the semiconductor chip, said lead electrodes, connecting means and said auxiliary electrode up to the same surface as that of all of said first, second, third, and fourth thin portions with a seal resin layer, after making a connection between said plurality of pad electrodes of said semiconductor chip mounted on said first thin portion and said plurality of lead electrodes by said with connecting means and making a connection between said lead electrodes and said auxiliary electrode; and

removing said first, second, third and fourth thin portions by etching so that each of said plurality of lead electrodes includes a thin internal lead portion having a connection part to said connecting means on the an upper surface side and a thick external electrode portion protruding toward the an under surface and forming a connection part to outside, wherein said seal resin layer is formed so that the has an underside thereof forms substantially the same surface as co-planar with the under surface of the internal lead portion of said lead electrodes and said auxiliary electrode, and so that said external electrode portion protrudes downward outward from the underside of said seal resin layer.

6. (Currently Amended) The method of manufacturing a semiconductor device according to claim 5, wherein the first, second, third, and fourth thin portions have substantially the same thickness.